

## WHAT IS CLAIMED IS:

1. A system for providing an enhanced calling service comprising:

a first network interface providing interfacing of a first communication device to an asynchronous network, wherein said first network interface includes a processor adapted to controllably direct a first media stream associated with said first communication device to a node in said asynchronous network; and

an interactive response process coupled to said asynchronous network and adapted to directly utilize packet network protocols, wherein said interactive response process comprises a processor adapted to accept at least a portion of said first media stream and to provide a media stream in response thereto, and wherein said processor of said interactive response process is further adapted to provide control signals to said first network interface to direct at least a portion of said first media stream to a node in said asynchronous network other than said interactive response process.

2. The system of claim 1, wherein said enhanced calling service comprises a call payment service.

3. The system of claim 2, wherein said at least a portion of said first media stream accepted by said interactive response process and said media stream provided in response to said first media stream comprises an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to payment of a call.

4. The system of claim 2, wherein said at least a portion of said first media stream accepted by said interactive response process and said media stream provided in response to said first media stream comprises an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate.

5. The system of claim 2, wherein said node in said asynchronous network other than said interactive response process is associated with a called party.

6. The system of claim 5, wherein said node in said asynchronous network other than said interactive response process comprises:

a second network interface providing interfacing of a second communication device to said asynchronous network, wherein said second network interface includes a processor adapted to controllably direct a second media stream associated with said second communication device to said first network interface under control of said processor of said interactive response process.

7. The system of claim 2, wherein said call payment service comprises a prepaid calling service.

8. The system of claim 2, wherein said call payment service comprises a postpaid calling service.

9. The system of claim 2, wherein said call payment service comprises a collect calling service.

10. The system of claim 1, wherein said enhanced calling service comprises a conference call service.

11. The system of claim 10, wherein said at least a portion of said first media stream accepted by said interactive response process and said media stream provided in response to said first media stream comprises an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate.

12. The system of claim 10, wherein said node in said asynchronous network other than said interactive response process is associated with a conference call party.

13. The system of claim 12, wherein said node in said asynchronous network other than said interactive response process comprises:

a second network interface providing interfacing of a second communication device to said asynchronous network, wherein said second network interface includes a processor adapted to controllably direct a second media stream associated with said second communication device to said first network interface under control of said processor of said interactive response process.

14. The system of claim 12, wherein said processor of said first network interface is adapted to controllably direct a second media stream associated with said first communication device to a node in said asynchronous network, wherein said processor of said interactive response process provides said control signals to said processor of said first network interface to thereby direct at least a portion of said first media stream to a first node and at least a portion of said second media stream to a second node, wherein said first node is said node in said asynchronous network other than said interactive response process.

15. The system of claim 14, wherein said control signals provided to said first network interface are operable to cause said first network interface to replicate at least a portion of said first media stream to thereby provide at least a portion of said second media stream.

16. The system of claim 14, wherein said second node comprises said interactive response process.

17. The system of claim 14, wherein said second node comprises a node in said asynchronous network other than said interactive response process and a node in said asynchronous network other than said first node.

18. The system of claim 1, wherein said first network interface comprises a network gateway device.

19. The system of claim 18, wherein said first communication device comprises a telephone.

20. The system of claim 1, wherein said first communication device comprises a multimedia personal computer.

21. The system of claim 1, wherein said first communication device comprises a gatekeeper.

22. The system of claim 1, wherein said first media stream comprises a real-time protocol media stream.

23. The system of claim 1, wherein said processor of said first network interface and said processor of said interactive response process establish a first control structure there between, wherein said call control structure is retained between said processor of said first network interface and said processor of said interactive response process when said at least a portion of said first media stream is directed to said node in said asynchronous network other than said interactive response process.

24. The system of claim 23, wherein said first control structure provides out of band signaling between said first communication device and said interactive response process.

25. The system of claim 24, wherein said out of band signaling provides information with respect to routing the first media stream to said node in said asynchronous network other than said interactive response process.

26. The system of claim 1, wherein said interactive response process is coupled to said asynchronous network as a network core device.

27. The system of claim 1, wherein said interactive response process is coupled to said asynchronous network via a network core device.

28. The system of claim 27, wherein said network core device is a gatekeeper.

29. The system of claim 1, wherein said interactive response process comprises interactive voice response functionality.

30. The system of claim 1, wherein said interactive response process comprises interactive multimedia response functionality.

00726470

31. A method for providing enhanced calling services comprising:

interfacing a first communication device to an asynchronous network;

interfacing an interactive response process to said asynchronous network, wherein said interactive response process is adapted to directly utilize packet network protocols;

5 directing a first media stream associated with said first communication device to said interactive response process;

accepting said first media stream by said interactive response process;

generating a second media stream by said interactive response process responsive to said first media stream;

directing said second media stream to said first communication device;

establishing a signaling channel between said first communication device and said interactive response process discrete from said first and second media streams;

accepting information from said first communication device via said signaling channel; and

controlling directing of said first media stream by said interactive response process responsive to said accepted information, wherein control of said first media stream is independent of control of said signaling channel.

32. The method of claim 31, further comprising:

determining the type of enhanced calling services to be performed.

33. The method of claim 32, wherein said determined type of enhanced calling services is selected from the group consisting of a prepaid calling card service, a postpaid calling card service, and a collect calling service.

34. The method of claim 32, wherein said determined type of enhanced calling services is selected from the group consisting of an international callback service, a one number service, a voice activated dialing service, and a conferencing service.

35. The method of claim 31, wherein said enhanced calling service comprises a call payment service.

36. The method of claim 35, wherein said first media stream accepted by said interactive response process and said second media stream generated in response thereto comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to payment of a call.

37. The method of claim 35, wherein said first media stream accepted by said interactive response process and said second media stream provided in response thereto comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate.

38. The method of claim 35, wherein said controlling directing of said first media stream by said interactive response process comprises:

redirecting said first media stream from said interactive response process to a second communication device interfaced to said asynchronous network while maintaining said signaling channel.

39. The method of claim 38, wherein said second communication device is associated with a called party.



40. The method of claim 38, wherein said redirecting said first media stream comprises:

directing a third media stream associated with said second communication device to said first communication device.

41. The method of claim 38, wherein said signaling channel is retained between said first communication device and said interactive response process when said first media stream is redirected.

42. The method of claim 41, wherein said signaling channel provides out of band signaling between said first communication device and said interactive response process.

43. The method of claim 42, wherein said out of band signaling provides information with respect to redirecting the first media stream.

44. The method of claim 35, wherein said call payment service comprises a prepaid calling service.

45. The method of claim 35, wherein said call payment service comprises a postpaid calling service.

46. The method of claim 35, wherein said call payment service comprises a collect calling service.

47. The method of claim 31, wherein said enhanced calling service comprises a conference call service.

48. The method of claim 47, wherein said first media stream accepted by said interactive response process and said second media stream provided in response thereto comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to a desired communication device with which said first communication device is to communicate.

49. The method of claim 47, wherein said controlling directing of said first media stream by said interactive response process comprises:

directing said first media stream to a second communication device interfaced to said asynchronous network.

50. The method of claim 49, wherein said second communication device is associated with a conference party.

51. The method of claim 49, wherein said directing said first media stream to a second communication device comprises:

signaling an asynchronous network interface associated with said first communication device to replicate said first media stream to thereby provide a first replication of said first media stream and a second replication of said first media stream, wherein said first replication of said first media stream is directed to said second communication device.

52. The method of claim 51, wherein said second replication of said first media stream is directed to said interactive response process.

53. The method of claim 51, wherein said second replication of said first media stream is directed to a third communication device interfaced to said asynchronous network.

54. The method of claim 31, wherein said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device.

55. The method of claim 31, wherein said first communication device comprises a multimedia personal computer.

56. The method of claim 31, wherein said first communication device comprises a gatekeeper.

57. The method of claim 31, wherein said first media stream comprises a real-time protocol media stream.

58. The method of claim 31, wherein said interactive response process is coupled to said asynchronous network as a network core device.

59. The method of claim 31, wherein said interactive response process is coupled to said asynchronous network via a network core device.

60. The method of claim 59, wherein said network core device is a gatekeeper.

61. The method of claim 31, wherein said interactive response process comprises interactive voice response functionality.

62. The method of claim 31, wherein said interactive response process comprises interactive multimedia response functionality.

63. A method for providing call payment services comprising:

interfacing a first communication device to an asynchronous network;

interfacing an interactive response process to said asynchronous network, wherein said interactive response process is adapted to directly utilize packet network protocols;

5 directing a first media stream associated with said first communication device to said interactive response process;

accepting said first media stream by said interactive response process;

generating a second media stream by said interactive response process responsive to said first media stream;

10 directing said second media stream to said first communication device, wherein said first media stream accepted by said interactive response process and said second media stream directed to said first communication device comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect to payment of a call and a desired second communication device with which said first communication device is to communicate;

15 establishing a signaling channel between said first communication device and said interactive response process discrete from said first and second media streams;

accepting information from said first communication device via said signaling channel in accordance with said dialogue; and

20 redirecting, as a function of said accepted information, said first media stream from said interactive response process to said second communication device interfaced to said asynchronous network while maintaining said signaling channel.

64. The method of claim 63, wherein said interactive response process monitors at least one aspect of said first media stream redirected to said second communication device.

65. The method of claim 64, wherein said monitored at least one aspect comprises a call duration.

66. The method of claim 64, wherein said monitoring is accomplished at least in part through signaling via said signaling channel.

67. The method of claim 63, wherein said redirecting said first media stream comprises:

directing a third media stream associated with said second communication device to said first communication device.

68. The method of claim 63, wherein said signaling channel provides out of band signaling between said first communication device and said interactive response process.

69. The method of claim 68, further comprising:

accepting additional information from said first communication device via said signaling channel during a time in which said first media stream is redirected to said second communication device; and

redirecting, as a function of said accepted additional information, said first media stream from said second communication device to said interactive response process.

70. The method of claim 69, further comprising:

accepting, by said interactive response process, said first media stream redirected from said second communication device;

generating a third media stream by said interactive response process responsive to said first media stream; and

directing said third media stream to said first communication device, wherein said first media stream accepted by said interactive response process and said third media stream directed to said first communication device comprise an interactive dialogue between said first communication device and said interactive response process.

71. The method of claim 70, wherein said dialogue includes dialogue with respect to payment of an additional call.

72. The method of claim 70, wherein said dialogue includes dialogue with respect to a desired third communication device with which said first communication device is to communicate.

73. The method of claim 69, wherein said call payment service comprises a prepaid calling service.

74. The method of claim 69, wherein said call payment service comprises a postpaid calling service.

75. The method of claim 69, wherein said call payment service comprises a collect calling service.

76. The method of claim 63, wherein said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device.

77. The method of claim 63, wherein said first communication device comprises a multimedia personal computer.

78. The method of claim 63, wherein said first media stream comprises a real-time protocol media stream.

79. The method of claim 63, wherein said interactive response process is coupled to said asynchronous network as a network core device.

80. The method of claim 63, wherein said interactive response process is coupled to said asynchronous network via a network core device.

81. The method of claim 80, wherein said network core device is a gatekeeper.

82. A method for providing conference calling services comprising:

interfacing a first communication device to an asynchronous network;

interfacing an interactive response process to said asynchronous network, wherein said interactive response process is adapted to directly utilize packet network protocols;

directing a first media stream associated with said first communication device to said interactive response process;

accepting said first media stream by said interactive response process;

generating a second media stream by said interactive response process responsive to said first media stream;

directing said second media stream to said first communication device, wherein said first media stream accepted by said interactive response process and said second media stream directed to said first communication device comprise an interactive dialogue between said first communication device and said interactive response process including dialogue with respect a desired second communication device with which said first communication device is to communicate and a desired third communication device with which said first communication device is to communicate;

establishing a signaling channel between said first communication device and said interactive response process discrete from said first and second media streams;

accepting information from said first communication device via said signaling channel in accordance with said dialogue;

signaling an asynchronous network interface associated with said first communication device to replicate said first media stream to thereby provide at least a first replication of said first media stream and a second replication of said first media stream, wherein said first replication of said first media stream is directed to said second communication device and said second replication of said first media stream is directed to said third communication device; and



terminating direction of said first media stream to said interactive response process while maintaining said signaling channel.

83. The method of claim 82, wherein said second communication device is associated with a conference party, and wherein said third communication device is associated with a conference party.

84. The method of claim 82, further comprising:

signaling an asynchronous network interface associated with said second communication device to replicate a third media stream to thereby provide at least a first replication of said third media stream and a second replication of said third media stream, wherein said first replication of said third media stream is directed to said first communication device and said second replication of said third media stream is directed to said third communication device.

85. The method of claim 84, further comprising:

signaling an asynchronous network interface associated with said third communication device to replicate a fourth media stream to thereby provide at least a first replication of said fourth media stream and a second replication of said fourth media stream, wherein said first replication of said fourth media stream is directed to said first communication device and said second replication of said fourth media stream is directed to said second communication device.

86. The method of claim 82, wherein said interfacing said first communication device to said asynchronous network comprises coupling said first communication device to a network gateway device.

87. The method of claim 82, wherein said first communication device comprises a multimedia personal computer.

88. The method of claim 82, wherein said first communication device comprises a gatekeeper.

89. The method of claim 82, wherein said first media stream comprises a real-time protocol media stream.

90. The method of claim 82, wherein said interactive response process is coupled to said asynchronous network as a network core device.

91. The method of claim 82, wherein said interactive response process is coupled to said asynchronous network via a network core device.

92. The method of claim 91, wherein said network core device is a gatekeeper.

FOOTNOTES